Attorney's Docket No.: 16163-012001 / GI005445



pplicant: Steven F. Sukits et al.

Art Unit : 1631

Serial No.:

: 09/854,906

Examiner: Michael L. Borin

Filed

: May 14, 2001

Title

SOLUTION STRUCTURE OF TNFR-1 DD AND USES THEREOF

MAIL STOP AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Applicants submit the references listed on the attached form PTO-1449.

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Respectfully submitted,

Date: 8/20/04

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Attorney's Docket No. 16163-012001

Application No. 09/854,906

Information Disclosure Statement by Applicant (Use several sheets if necessary)

Steven F. Sukits et al.

Filing Date

Group Art Unit 1631

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May 14, 2001

Applicant

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA						
	AB						

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes N	on Vo
	AC							
	AD							

	Other Documents (include Author, Title, Date, and Place of Publication)				
Examiner Initial	Initial ID Document				
	AE	Bax et al., "Measurement of Long-Range ¹³ C- ¹³ C J Couplings in a 20-kDa Protein-Peptide Complex," J. Am. Chem. Soc., 114:6923-6925 (1992)			
	AF	Beutler et al., "The Biology of Cachectin/TNF-A Primary Mediator of the Host Response," Ann. Rev. Immunol., 7:625-655 (1989)			
	AG	Brünger, A.T., X-PLOR Version 3.1 Manual, Yale University, New Haven, CT (1993) (Table of Contents)			
	АН	Carswell et al., "An Endotoxin-Induced Serum Factor that Causes Necrosis of Tumors," Proc. Nat. Acad. Sci. USA, 72:3666-3670 (1975)			
	AI	Clore et al., "Three Dimensional Structure of Potato Carboxypeptidase Inhibitor in Solution. A Study Using Nuclear Magnetic Resonance, Distance Geometry, and Restrained Molecular Dynamics," Biochemistry, 26:8012-8023 (1987)			
	AJ	Clore et al., "Three-Dimensional Structure of Interleukin 8 in Solution," Biochemistry, 29:1689-1696 (1990)			
	AK	Cornilescu et al., "Protein backbone angle restraints from searching a database for chemical shift and sequence homology," Journal of Biomolecular NMR, 13:289-302 (1999)			
	AL	Delaglio et al., "NMR Pipe: A multidimensional spectral processing system based on UNIX pipes," Journal of Biomolecular NMR, 6:277-293 (1995)			
	AM	Garrett et al., "A Common Sense Approach to Peak Picking in Two-, Three-, and Four-Dimensional Spectra Using Automatic Computer Analysis of Contour Diagrams," Journal of Magnetic Resonance, 95:214-220 (1991)			
,	AN	Garrett et al., "The Impact of Direct Refinement against Three-Bond HN-C "H Coupling Constants on Protein Structure Determination by NMR," Journal of Magnetic Resonance, 104:99-103 (1994)			
	AO	Grzesiek et al., "A simple and sensitive experiment for measurement of J _{CC} couplings between backbone carbonyl and methyl carbons in isotopically enriched proteins," Journal of Biomolecular NMR, 3:487-493 (1993)			
	AP	Jiang et al., "Prevention of Constitutive TNF Receptor 1 Signaling by Silencer of Death Domains," Science, 283:543-546 (1999)			

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if no	t in conformance and not considered. Include copy of this form with
next communication to applicant.	

Substitute Form PTO-1449 (Modified) **Information Disclosure Statement**

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Attorney's Docket No. Application No. 16163-012001 09/854,906

Applicant

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Group Art Unit 1631

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May 14, 2001

& TREE	Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig. ID	Document
	AQ	Kanelis et al., "NMR studies of tandem WW domains of Nedd4 in complex with a PY motif- containing region of the epithelial sodium channel," Biochem. Cell Biol., 76:341-350 (1998)
	AR	Kay et al., "New Methods for the Measurement of NH-CαH Coupling Constants in ¹⁵ N-Labeled Proteins," Journal of Magnetic Resonance, 86:110-126 (1990)
	AS	Kay et al., "Pulsed Field Gradient Multi-Dimensional NMR Methods for the Study of Protein Structure and Dynamics in Solution," Prog. Biophys. Molec. Biol., 63:277-299 (1995)
	AT	Kuszewski et al., "The Impact of Direct Refinement against ¹³ C ^α and ¹³ C ^β Chemical Shifts on Protein Structure Determination by NMR," Journal of Magnetic Resonance, 106:92-96 (1995)
	AU	Kuszewski et al., "Improving the quality of NMR and crystallographic protein structures by means of a conformational database potential derived from structure databases," Protein Science, 5:1067-1080 (1996)
	AV	Kuszewski et al., "Improvements and Extensions in the Conformational Database Potential for the Refinement of NMR and X-ray Structures of Proteins and Nucleic Acids," Journal of Magnetic Resonance, 125:171-177 (1997)
	AW	Laskowski, "PROCHECK: a program to check the stereochemical quality of protein structures," J. Appl. Cryst., 26:283-291 (1993)
	AX	Laskowski et al., "AQUA and PROCHECK-NMR: Programs for checking the quality of protein structures solved by NMR," Journal of Biomolecular NMR, 8:477-486 (1996)
	AY	Marion et al., "Overcoming the Overlap Problem in the Assignment of ¹ H NMR Spectra of Larger Proteins by Use of Three-Dimensional Heteronuclear ¹ H- ¹⁵ N Hartmann-Hahn-Multiple Quantum Coherence and Nuclear Overhauser-Multiple Quantum Coherence Spectroscopy: Application to Interleukin 1β," Biochemistry 28:6150-6156 (1989)
	AZ	Muhandiram et al., "Gradient-Enhanced Triple-Resonance Three-Dimensional NMR Experiments with Improved Sensitivity," Journal of Magnetic Resonance," 103:203-216 (1994)
	AAA	Nilges et al., "Determination of three-dimensional structures of proteins by simulated annealing with interproton distance restraints. Application to crambin, potato carboxypeptidase inhibitor and barley serine proteinase inhibitor 2," Protein Engineering, 2:27-39 (1988)
	ABB	Pascal et al., "Simultaneous Acquisition of ¹⁵ N- and ¹³ C-Edited NOE Spectra of Proteins Dissolved in H ² 0," Journal of Magnetic Resonance, 103:197-201 (1994)
	ACC	Šali et al., "Evaluation of Comparative Protein Modeling by MODELLER," PROTEINS: Structure, Function, and Genetics, 23:318-326 (1995)
•	ADD	Sánchez et al., "Evaluation of Comparative Protein Modeling by MODELLER-3," PROTEINS: Structure, Function, and Genetics, Suppl., 1:50-58 (1997)
•	AEE	Smith et al., "A Receptor for Tumor Necrosis Factor Defines and Unusual Family of Cellular and Viral Proteins," Science, 248:1019-1023 (1990)
	AFF	Smith et al., "The TNF Receptor Superfamily of Cellular and Viral Proteins: Activation, Costimulation, and Death," Cell, 76:959-962 (1994)
•	AGG	Tartaglia et al., "Two TNF receptors," Immunology Today, 13:151-153 (1992)
	АНН	Tartaglia et al., "A Novel Domain within the 55 kd TNF Receptor Signals Cell Death," Cell, 74:845-853 (1993)
	AII	Vandenabeele, et al, "Two tumour necrosis factor receptors: structure and function," Trends in Cell Biology, 5:392-399 (1995)

Examiner Signature	Date Considered			
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Other Documents (include Author, Title, Date, and Place of Publication)				
ſ	Examiner	Desig.		
	Initial	ID	Document	
	-	AJJ	Vaughn et al., "Crystal Structure of Apaf-1 Caspase Recruitment Domain: An χ-Helical Greek Key Fold for Apoptotic Signaling," J. Mol. Biol., 293:439-447 (1999)	
AKK Geometry, The Polypeptide Fold of the Basic Pancreatic Trypsin Inhibitor Different Algorithms, DISGEO and DISMAN," Mol. Biol., 196:611-639 (Wüthrich et al., "Pseudo-structures for the 20 Common Amino Acids for U Conformations by Measurements of Intramolecular Proton-Proton Distanc Nuclear Magnetic Resonance," J. Mol. Biol., 169:949-961 (1983) Xu et al., "Solution Structure of a Cellulose-Binding Domain from Cellulo Magnetic Resonance Spectroscopy," Biochemistry, 34:6993-7009 (1995) Zhu et al., "Improved Linear Prediction of Damped NMR Signals using M Backward" Linear Prediction," Journal of Magnetic Resonance, 100:202-2		AKK	Wagner et al., "Protein Structures in Solution by Nuclear Magnetic Resonance and Distance Geometry, The Polypeptide Fold of the Basic Pancreatic Trypsin Inhibitor Determined Using Two Different Algorithms, DISGEO and DISMAN," Mol. Biol., 196:611-639 (1987)	
		ALL	Wüthrich et al., "Pseudo-structures for the 20 Common Amino Acids for Use in Studies of Protein Conformations by Measurements of Intramolecular Proton-Proton Distance Constraints with Nuclear Magnetic Resonance," J. Mol. Biol., 169:949-961 (1983)	
		AMM	Xu et al., "Solution Structure of a Cellulose-Binding Domain from Cellulomonas fimi by Nuclear Magnetic Resonance Spectroscopy," Biochemistry, 34:6993-7009 (1995)	
		Zhu et al., "Improved Linear Prediction of Damped NMR Signals using Modified "Forward-Backward" Linear Prediction," Journal of Magnetic Resonance, 100:202-207 (1992)		
		Zuiderweg et al., "Heteronuclear Three-Dimensional NMR Spectroscopy of the Inflammatory Protein C5a," Biochemistry, 28:2387-2391 (1989)		

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